

TECHNICAL DATA SHEET

MARINE SOLUTIONS GLASS GUARD

Material no.

Specification

Version

154287

1.1

Revision date

09.05.2023



MARINE SOLUTIONS GLASS GUARD

A 2-COMPONENT COATING SYSTEM FOR HYDRO AND OLEOPHOBIC TREATMENT OF GLASS AND CERAMIC SURFACES.

Description

glass guard is a user-friendly 2-component coating system for glass surfaces. The right amount of formulation is achieved by mixing the two components at ratio of 1:1 (by volume). This mixture is ready for application after about 1 minute of shaking or stirring. It should be used within 1 day. This gives the user flexibility in designing the working steps and prevents waste. The consumption of the ready-to-use product will depend on the application method, approximately 1-5 ml/m² is sufficient for most applications.

Technical Data

Property	Glass M1	Glass M2	Method
Flash point	<15°C	18°C	DIN 51755
Density	0.8 g/cm ³ (at 20°C)	0.89 g/cm ³ (at 20°C)	DIN 51757
Viscosity	2 mPA.s (at 20°C)	3.7 mPA.s (at 20°C)	DIN 53015

Applications

Treatment of windshields:

- Better visibility in the rain, particularly on throughways and rural roads.
- During winter: Obviates time-consuming de-icing.
- During summer: Insect splatter is easier to remove.

Easy-to-clean glass components of shower stalls, sanitary ceramics:

- Lime and soap residues can be removed easily.
- Aggressive cleaning agents are not needed. Wipe with a wet cloth is generally sufficient.

Easy-to-clean surfaces on other glass objects (e.g. greenhouses, canopies, skylights, etc.):

- The cleaning cycle is extended.
- Less cleaning agent is needed.
- Dirt is easier to remove.

Processing

- Do not apply the product at temperatures below 10°C (41°F).
- Do not expose the surfaces to be treated to direct sunlight prior or during application.
- The surface must not be hot during application.
- Provide adequate ventilation and fresh air during application.
- If the substrate was previously treated with a coating system, proper removal, preferably with **spot free** to ensure that the products bonds with the surface.

REMINDER: Always test on an inconspicuous area first. Kindly contact your local IGL Coatings representative if you need advice.

Step 1: Mixing the coating formulation

- Mixing the formulation at room temperature is recommended.
- Before treating the surface, **glass guard M2** should be mixed with **glass guard M1** at ratio of 1:1 (by volume, e.g. 15ml +15ml). The mixture should be shaken for at least 3 minute to ensure the mixture is well mixed.
- After the mixing process, the mixture is ready to use, and has to be used within 1 day.
- Before the application, the substrate has to be cleaned.
- The temperature during processing should be in the range of 10-30°C (50-86°F), **preferably 15-25°C (59-77°F).**

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Step 2: Cleaning the surface

- In order to permit sufficient chemical bonding of **glass guard** to the substrate, the surfaces have to be carefully cleaned before the application. The durability of the coating depends on how well the **glass guard** is chemically bonded with the substrate.
- For optimum surface pre-treatment, especially for uncoated glass, abrasive cleaning with **spot free** is recommended.
- **spot free** should be shaken thoroughly before use. The slurry can be applied with a sponge or paper towel and should be polished uniformly for several minutes until a thin water film is obtained.
- The dried **spot free** should be wiped off with a clean dry paper cloth or rinse off with water. Repeat several times until the slurry is completely removed.
- The abrasive cleaning ensures a completely clean and reactive glass surface.
- After the abrasive cleaning, dry the surface with a clean cloth. The surface should be coated immediately.

Step 3: Treatment process

- Direct exposure to sunlight during application should be avoided.
- In the case of windshield treatment, the two halves of the windshield (left/right) should be treated one after the other.
- A certain amount of the mixture is applied as a thick liquid and should be polished quickly and uniformly in a vertical (up and down), then horizontal (left to right) direction with the provided application cloth for at least ½ to 1 minute. In case the coating evaporates before it has been uniformly polished, more formulation needs to be applied.
- After 1 hour, buff off the excess solution with a clean microfiber towel. Resistance will be felt during buffing off. Persistent residues can be removed using a small amount of **glass guard**.
- Repeat the step on the other half of the windshield. Always ensure the areas coated are overlapping.
- The hydrophobic effect generally can be seen depending on the substrate, reactivity, and temperature after 1 hour and is further enhanced after a few hours.
- The coating should be air-dried for about 4 hours and avoid contact with water. The usage of windshield wipers must be avoided, if possible.

Re-coating Coated Glass Surfaces

The hydrophobic and oleophobic effects of **glass guard** is long-lasting. Once the effect wear-off, the surface can be re-coated. To re-coat the surface, remove the previous coating residue with **spot free** (Refer to Step 2) and then apply **glass guard** (Refer to Step 3). If the surface was previously treated with a different coating, repeated cleaning with **spot free** is vital.

Usage

The use of **glass guard** on windshields does not mean that you can do completely without windshield wipers. Turn on the windshield wipers if necessary, to provide the driver with a clear view during the rain. In particular, worn windshield wiper blades and glycol-containing windshield cleaners can form some streaks on the coated surface. In this case, replace the blades and do not use any glycol-containing anti-freeze agents in the windshield fluid reservoir.

Safety and Handling

For your safety, toxicological data and information on property transportation, storage and use, please read the Safety Data Sheet (SDS) before using any **IGL Coatings products**. The SDS is available upon request via email from sales@iglcoatings.com.

Disposal

Dispose product residue in incompletely emptied bottles by bringing it to the municipal collection point for hazardous waste. To dispose emptied bottles, dry the bottles out by exposing the bottles to air with cap open. The bottles may be recycled once is dried.

Storage

Glass guard M1 and **M2** is storage-stable for at least 12 months in originally sealed containers. The mixed formulation must be used within 1 day.

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